Re: Simple audio signal to level convertor?

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- *From*: "Bob Eld" <nsmontassoc@xxxxxxxxx>
- *Date*: Wed, 2 Jul 2008 16:01:43 −0700

"Kasterborus" <kasterborus@xxxxxxxxx> wrote in message
news:991686a5−accb−4b91−bf75−f676f51c28c7@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

> Hi,
>
> I'm looking for a circuit that can read a standard line level audio
> signal and output a continous voltage 0−5v proportional to the
> amplitude of the input.
>
> This in turn would be read by an ADC/microprocessor to modulate some
> flashing lights.
>
> As always − any help is greatly appreciated.
>
> Dave

Since you are going to ADC it anyway, simply capacitivly couple the audio
signal into the ADC. Insure that the max peak of the audio signal is within
the ADC range.

Convert to digital then detect and hold the maximum values for a determined
length of time. Use the numerical value in this hold register to control
what ever.

Each converted value is compared with the previously held value and updates
the held value if larger. A timer starts or restarts on each hold update.
The register is cleared on the expiration of the timer. This creates a
running peak of the audio signal.

The peaks values of most audio signals will be emphasized in the bass
region. This can be tailored with simple filtering if needed which isn't
likely.

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